

## ABSTRACT OF THE DISCLOSURE

This invention provides a product shape designing process for designing an optimal product shape, particularly a pneumatic tire contor in a cross section, comprising the following steps. A shape generation step of setting plural basal shapes and linearly combining the basal shapes to generate plural sample product shapes, a performance evaluation step of obtaining evaluation values on a product performance of the sample product shapes generated in the shape generation step, and a product shape extraction step of extracting an optimal product shape whose evaluation value on the product performance is an optimal value based on the evaluation values on the product performance obtained in the performance evaluation step. This process realizes a smooth optimal tire contor that reduces rolling resistance coefficient while increasing lateral spring constant of the tire for good drivability.